(19) JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2000002111 A**

(43) Date of publication of application: **07.01.00**

(51) Int. Cl **F01N 3/28**
B01D 53/94
B01J 23/42
B01J 29/12
B01J 29/44
B01J 35/04
F01N 3/10

(21) Application number: **10168879**

(22) Date of filing: **16.06.98**

(71) Applicant: **TOYOTA MOTOR CORP**

(72) Inventor: **TAKAHASHI HIROAKI**

(54) **CATALYST FOR EXHAUST GAS EMISSION CONTROL**

(57) Abstract:

PROBLEM TO BE SOLVED: To contrive reduction removal of N2O and reduction purification of NOx by arranging NOx reduction catalyst, for reducing and purifying nitrogen oxide, and N2O decomposition catalyst, for decomposing dinitrogen monoxide into gaseous nitrogen and gaseous oxygen, on an exhaust gas inflow side and an exhaust gas outflow side, respectively.

SOLUTION: Each of NOx (nitrogen oxide), reduction catalyst and N2O (dinitrogen monoxide) decomposition catalyst is arranged in the order from an upstream side on an exhaust gas duct. NOx in exhaust gas is reduced by HC and CO in exhaust gas and is sometimes reduced up to N2 (gaseous nitrogen), but because N2O decomposition catalyst is arranged on the downstream side of NOx reduction catalyst, N2O is further reduced up to N2 by N2O decomposition catalyst and is purified. As NOx reduction catalyst, catalyst that noble metal is supported by a porous carrier can be used, as the porous carrier, alumina and silica can be used and as noble metal, Pt, Rh, Pd, Ir can be used. As a result, N2O can be efficiently reduced, decomposed and removed.